

**METHODS AND APPARATUS FOR INTEGRATED CIRCUIT BALL BONDING
WITH SUBSTANTIALLY PERPENDICULAR WIRE BOND PROFILES**

Abstract

Techniques for ball bonding wires in an integrated circuit are provided which allow
5 formation of desired wire bond profile shapes for optimal performance. A wire is ball bonded to a
first bond site in the integrated circuit with a bonding tool and at least one bend is formed in the wire.
The wire is terminated at a second bond site with the bonding tool, thereby creating a wire bond
profile. The technique is repeated for a plurality of additional wire bonds of the integrated circuit,
and at least two wire bond profiles in the integrated circuit are substantially perpendicular to one
10 another at a crossing point of the profiles.